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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/005,590	10/26/2001	Alexander Tormasov	44151-00005USPT	8122

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EXAMINER

BATAILLE, PIERRE MICHE

ART UNIT PAPER NUMBER

2186

DATE MAILED: 02/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,590

Applicant(s)

TORMASOV ET AL.

Examiner

Pierre-Michel Bataille

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-45 is/are pending in the application.
- 4a) Of the above claim(s) 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office Action is responsive to Applicant's communication filed December 30, 2004 in responding to Final Action dated December 14, 2004. Applicant's amendment and/or arguments have been considered with the results that follow. Claims 1-8 and 10-45 are pending in the application under prosecution, as claim 9 has been previously canceled.

Response to Arguments

2. Applicant's arguments with respect to claims 1-8 and 10-45 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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4. Claims 1, 7, 20, 30, and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by US 2002/0055989 (Stringer-Clavert et al).

With respect to claim 1, Stringer discloses a groupware management system for collaborative group to support large, dynamic, multiple and other virtual private network, comprising: a computer cluster formed by a plurality of hardware-independent cluster nodes (***multiple interconnected nodes communicating with each other via the network as members***), said computer cluster including a control center (***a master node***); and a plurality of virtual environments running on the computer cluster (***a plurality of virtual private networks (VPN)***), wherein the virtual environments do not require dedicated memory, wherein said control center coordinates functions of said plurality of hardware-independent cluster nodes (***master node controls VPN membership of a collaborative group***). (See paragraph 0008; 0022)

With respect to claim 20, Stringer-Clavert discloses a groupware management system and method for collaborative group to support large, dynamic, multiple and other virtual private network, comprising: a plurality of hardware-independent cluster nodes forming a computer cluster (***multiple interconnected nodes communicating with each other via the network as members***); a plurality of virtual environments supported by the cluster nodes and providing hosting services (***a plurality of virtual private networks (VPN)***); and a control center that coordinates functions of the computer cluster (***master node***

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controls VPN membership of a collaborative group). (See paragraph 0008; 0022)

With respect to claims 30 and 45, Stringer-Clavert discloses a groupware management system and method for collaborative group to support large, dynamic, multiple and other virtual private network, comprising: forming a computer cluster from a plurality of hardware-independent cluster nodes **(multiple interconnected nodes communicating with each other via the network as members)**; operating a plurality of virtual environments supported by the nodes **(a plurality of virtual private networks (VPN))**; providing hosting services from the virtual environments; and establishing a control center for managing functions of the computer cluster **(master node controls VPN membership of a collaborative group).** (See paragraph 0008; 0022)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-6, 8, 10-19, 21-29, and 31-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2002/0055989 (Stringer-Clavert et al) in view of US 2002/0188657 (Traversat)

With respect to claims 14 and 39, Stringer-Clavert discloses a groupware management system and method for collaborative group to support large, dynamic, multiple and other virtual private network, comprising: requesting a service from an operating system; operating a virtual environment for delivery of the service to a user (***a master node performing functions as well as distribution and maintenance over for private communication among member nodes***); and utilizing a distributed file system for use by the virtual environment (***master node controlling VPN membership of a collaborative group utilizing a single encryption domain***) [Paragraph 0019; 0022-0023]. Although Stringer-Clavert discloses master node controlling VPN membership of a collaborative group utilizing a single domain, there is no specific teaching that the single domain refers to a common name space. However, Traversat discloses system and method for uniquely identifying peers and other resources in a peer-to-peer networking environment wherein every peer in the peer-to-peer network may have a unique peer identifier, the identifier being bound to a network address [***abstract; paragraph 0033***]. Therefore, it would have been obvious to one of ordinary skill in the art to include the uniformity of name space because the name would have guaranteed the clients accesses via Uniform resource Locator (URL), as taught by Traversat (***paragraph 0031***).

With respect to claims 2, 21 and 31, Stringer-Calvert discloses the group management system wherein said plurality of hardware-independent cluster

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nodes further comprises a distributed file system **(not require any centrally managed build-up of infrastructure but peer-to-peer networks including file and resource sharing services)** [Paragraphs 0047; 0019; 0022-0023].

Although Stringer-Claver discloses master node controlling VPN membership of a collaborative group utilizing a single domain, there is no specific teaching that the single domain refers to a common name space. However, Traversat discloses system and method for uniquely identifying peers and other resources in a peer-to-peer networking environment wherein every peer in the peer-to-peer network may have a unique peer identifier, the identifier being bound to a network address **[abstract; paragraph 0033]**. Therefore, it would have been obvious to one of ordinary skill in the art to include the uniformity of name space because the name would have guaranteed the clients accesses via Uniform resource Locator (URL), as taught by Traversat **(paragraph 0031)**.

With respect to claims 3 and 22, Stringer-Calvert discloses the groupware management system and method wherein said distributed file system is integrated and optimized for said computer cluster **(not require any centrally managed build-up of infrastructure but peer-to-peer networks including file and resource sharing services)** [Paragraphs 0047; 0019; 0022-0023].

With respect to claims 4 and 23, Stringer-Calvert discloses the groupware management system and method wherein said distributed file system stores data for the plurality of virtual environments **(not require any centrally managed**

build-up of infrastructure but peer-to-peer networks including file and resource sharing services) [Paragraphs 0047; 0019; 0022-0023].

With respect to claims 5, 10, 25, 29, 32-33, Stringer-Calver discloses the groupware management system and method wherein each of said plurality of virtual environments not requiring other dedicated hardware resources software ***[0047; 0019; 0022-0023]***; providing virtualization of a full service computer with its own operating system ***[Par. 0047; 0019; 0022-0023]***; a unique administrative root user for each member of said plurality of virtual environments ***[paragraph 008, 0022, 0025]***. Stringer-Calvert, however, fails to teach a file system template and a file tree. However, Traversat teaches a system and method for distributed, highly scalable, wide area peer-to-peer network data storage wherein data and directory files include a file system template and file tree ***[abstract; Paragraph 0086]***. Therefore, it would have been obvious to one of ordinary skill in the art to include a file system template and a file tree because the file system template and file tree would have permitted improved search capabilities as searching capabilities may include distributed, parallel searches across peer groups that are facilitated by matching an XML representation of a query to be processed with representations of the responses that can be provided by each peer, as suggested by Traversat [paragraph 0086].

With respect to claim 15, Stringer-Calvert discloses the groupware management system and method wherein operating said virtual environment further comprises installing an application into the virtual environment ***[Paragraphs 0010, 0029, 0039]***.

With respect to claim 16, Stringer-Calvert discloses the groupware management system and method wherein operating said virtual environment further comprises configuring an application **[Paragraphs 0010, 0029, 0039]**.

With respect to claim 17, Stringer-Calvert discloses the groupware management system and method wherein operating said virtual environment further comprises launching an application of said operating system from said virtual environment **[Paragraphs 0010, 0029, 0039]**.

With respect to claim 18, Stringer-Calvert discloses the groupware management system and method wherein operating said virtual environment further comprises repairing remotely a failed software configuration of said virtual environment **[Paragraphs 0010, 0029, 0039]**.

With respect to claim 19, Stringer-Calvert discloses the groupware management system and method wherein utilizing a distributed file system further comprises achieving a desired fault tolerance level **[Paragraphs 0010, 0029, 0039]**.

With respect to claims 6, 8, 11, 24, 37-38, and 43-44, Stringer-Calvert discloses the invention as claimed but fails to teach distributing updated files to achieve appropriate level of accessibility. However, Traversat teaches a system and method for distributed, highly scalable, wide area peer-to-peer network data storage wherein data and directory files are divided into a plurality of pieces stored on different servers, the files are uniformly and independently named, utilizing a tree with a common root **[Par. 0086]**. Therefore, it would have been obvious to one of ordinary skill in the art to distribute updated files to achieve

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appropriate level of accessibility as taught by Traversat, because the result would have permitted improved search capabilities as searching capabilities may include distributed, parallel searches across peer groups, as suggested by Traversat [**paragraph 0086**].

With respect to claims 12-13, 34-36, and 40-42, Stringer-Calvert discloses operating each member of said plurality of hardware-independent cluster nodes further comprising: installing an operating system and establishing and configuring network connections; providing access to the distributed file system containing the file system template for each virtual environment within said cluster node; accessing the resources of said cluster node; and utilizing said cluster node for launching new virtual environments [**Paragraphs 0010, 0029, 0039**].

With respect to claims 26-28, Stringer-Calvert discloses the groupware management system and method wherein each of the plurality of virtual environments does not require dedicated hardware resources or locking of hardware resources that are supported by standard operating system mechanisms; or emulation of hardware resources [**Virtual Private network with no dedicated hardware and visual interconnection where assignment of a member to a network group is dynamic**) Paragraph 0008, 0018].

7. Claims 1, 7, 20, 30, and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by US 2002/0145960 (Goren et al).

With respect to claims 1, 20, US 2002/0143960 (Goren) teaches a platform for providing hosting service (**Fig. 1C; 9D; 9E**) comprising: a computer cluster formed by a plurality of hardware-independent cluster nodes (**private network communities (PNC-1 ~ PNC-3) with the PNCs being actually cluster nodes of secure channels [par. 0052, 0011]**), said computer cluster including a control center (**PNC control manager, PNC server 70**); and a plurality of virtual environments running on the computer cluster (**virtual private networks (VPN) or PNC control center; PNC workgroups forming virtual network segments (PNCs)**) [par. 0052; 0011 & 007], wherein the virtual environments do not require dedicated memory (**a group of independent nodes with having access to shared not inherently dedicated infrastructure with all network-enabled application available to the clients**) [Par. 0047], wherein said control center coordinates the functions of said plurality of hardware-independent cluster nodes (**PNC control manager or VNG server for establishing or managing each PNC or the other resources; each PNC is setup and controlled automatically, dynamically and remotely by a PNC server**) [par. 0052; 0054 & 0055].

With respect to claim 7, 30, and 45, Goren teaches the method providing hosting service in a cluster computing system having: a plurality of hardware-independent cluster nodes (**private network communities (PNC-1 ~ PNC-3) with the PNCs being actually cluster nodes of secure channels [par. 0052, 0011]**); a control center for coordinating functions of said plurality of cluster nodes (**PNC control manager or VNG server 70 for establishing or managing each**

PNC or the other resources; each PNC is setup and controlled automatically, dynamically and remotely by a PNC server) [par. 0052; 0054 & 0055], ; and a plurality of virtual environment on the computer cluster (virtual private networks (VPN) or PNC control center; PNC workgroups forming virtual network segments (PNCS)) [par. 0052; 0011 & 007] wherein the virtual environments do not require dedicated memory cluster (a group of independent nodes with having access to shared not inherently dedicated infrastructure with all network-enabled application available to the clients) [Par. 0047].

Conclusion

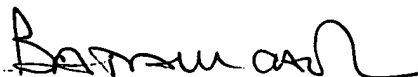
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pierre-Michel Bataille whose telephone number is (571) 272-4178. The examiner can normally be reached on Mon-Fri (9:30A to 6:00P).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pierre-Michel Bataille
Primary Examiner
Art Unit 2186

February 10, 2005

PIERRE BATAILLE
PRIMARY EXAMINER